## WHAT IS CLAIMED IS:

1. A method for determining the presence of anionic phospholipids in a sample of cells or vesicles, comprising:

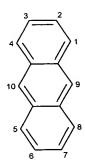
introducing a compound having the following structure to said sample wherein said compound binds to said anionic phopholipids on the surface of said cells or vesicles; and

detecting the presence of said compound via its fluorescence emission which indicates the presence of anionic phospholipids in said sample upon association of said compound with said anionic phospholipids.

- 2. The method of claim 1, wherein said anionic phospholipids comprise phosphatidylserine.
- 3. The method of claim 1, wherein said method is carried out in a low calcium environment.
- 4. The method of claim 1, wherein said method is carried out in a substantially calcium free environment.
- 5. The method of claim 1, wherein said compound is calcium independent.
- 6. A method for determining the presence of anionic phospholipids in a sample of cells or vesicles, comprising:

introducing a compound having the following structure to said sample wherein said compound binds to said anionic phopholipids on the surface of said cells or vesicles; and

detecting the presence of said compound via its fluorescence emission which indicates the presence of anionic phospholipids in said sample upon association of said compound with said anionic phospholipids,



wherein said compound further comprises at least two ligands at positions selected from the group consisting of 1,2; 1,3; 1,4; 1,5; 1,6; 1,7; 1,8; 1,9; 1,10; 2,3; 2,4; 2,5; 2,6; 2,7; 2,8; 2,9; and 2,10, wherein said ligands comprise

wherein M is a divalent or trivalent transition or lanthanide metal cation, A is a weakly coordinating counter anion, and L is a metal cation binding ligand.

- 7. The method of claim 6, wherein said anionic phospholipids comprise phosphatidylserine.
- 8. The method of claim 6, wherein said method is carried out in a low calcium environment.
- 9. The method of claim 6, wherein said method is carried out in a substantially calcium free environment.
- 10. The method of claim 6, wherein said compound is calcium independent.
- 11. The method of claim 6, wherein M comprises Zn<sup>2+</sup>.
- 12. The method of claim 6, wherein M comprises Cu<sup>2+</sup>.
- 13. The method of claim 6, wherein M comprises Ni<sup>2+</sup>.

- 14. The method of claim 6, wherein M comprises Co<sup>3+</sup>.
- 15. The method of claim 6, wherein M comprises Eu<sup>3+</sup>.
- 16. The method of claim 6, wherein M comprises Nb<sup>3+</sup>.
- 17. The method of claim 6, wherein A comprises Cl.
- 18. The method of claim 6, wherein A comprises Br.
- 19. The method of claim 6, wherein A comprises I.
- 20. The method of claim 6, wherein A comprises CH<sub>3</sub>COO<sup>-</sup>.
- 21. The method of claim 6, wherein A comprises HPO<sub>3</sub>.
- 22. The method of claim 6, wherein A comprises HSO<sub>4</sub>.
- 23. The method of claim 6, wherein A comprises SO<sub>4</sub><sup>2</sup>.
- 24. The method of claim 6, wherein A comprises NO<sub>3</sub>.
- 25. The method of claim 6, wherein L comprises the following structure

26. The method of claim 6, wherein L comprises the following structure

27. The method of claim 6, wherein L comprises the following structure

$$-N$$

28. The method of claim 6, wherein L comprises the following structure

$$-N$$

29. The method of claim 6, wherein L comprises the following structure

30. The method of claim 6, wherein L comprises the following structure

31. The method of claim 6, wherein said at least two ligands comprises two ligands.

- 32. The method of claim 6, wherein said at least two ligands comprises three ligands.
- 33. The method of claim 6, wherein said at least two ligands comprises four ligands.